Outdoor LBS – relationship between users, providers, and place.

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Extended Abstract

An increasing number of local decision-makers are commissioning smartphone applications to promote their city, often including LBS features. Although more and more resources are invested in this, it is difficult to quantify how often these applications are used; most of the information currently published concerns successful applications, while the systematic review by Nielsen (2014) showed than many attempts had been unsuccessful. Considering leisure and tourism activities in the outdoor, smartphone apps have the potential to improve the outdoor experience of users but also to inform the provider (e.g. municipalities, tourism offices, or private companies) on the use of places.

Focusing on the outdoor use of the LBS apps, we identified three actors: the *provider* of the application, the *user*, and the *place* that relates both together. We also identified possible interactions between these actors, with information being exchanged from the user to the provider or from the provider to the user. These interactions are tightly related to the place, and therefore the applications facilitate them. We believe that modelling these interactions enables a better understanding of mobile apps potentials, and therefore that considering them is crucial to the development of relevant mobile applications.

Our model defines four types of communications: **Information** is a mode of interaction where the user receives localised data from a provider relevant to a place. Considering the mirroring communication exchange, from user to provider, **Feedback**, corresponds to users giving information to a provider about a place. Adding the possibility of users to communicate with

each other, **interaction**, is when the users share information with each other about a place. Finally, applications where provider and users exchange information relevant to places, consist of **participation**.

The impact on users is different depending on each application; either increasing the sense of security, making places more real, or giving a sense of ownership (Farrelly 2012). Depending on the intention of the provider, either mode of communication should be used. Reflections on these communication styles would support providers of smartphone LBSapps to design adapted smartphone applications that efficiently promote businesses.

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